

(43) Date of A Publication 08.12.1999

Fig 1.

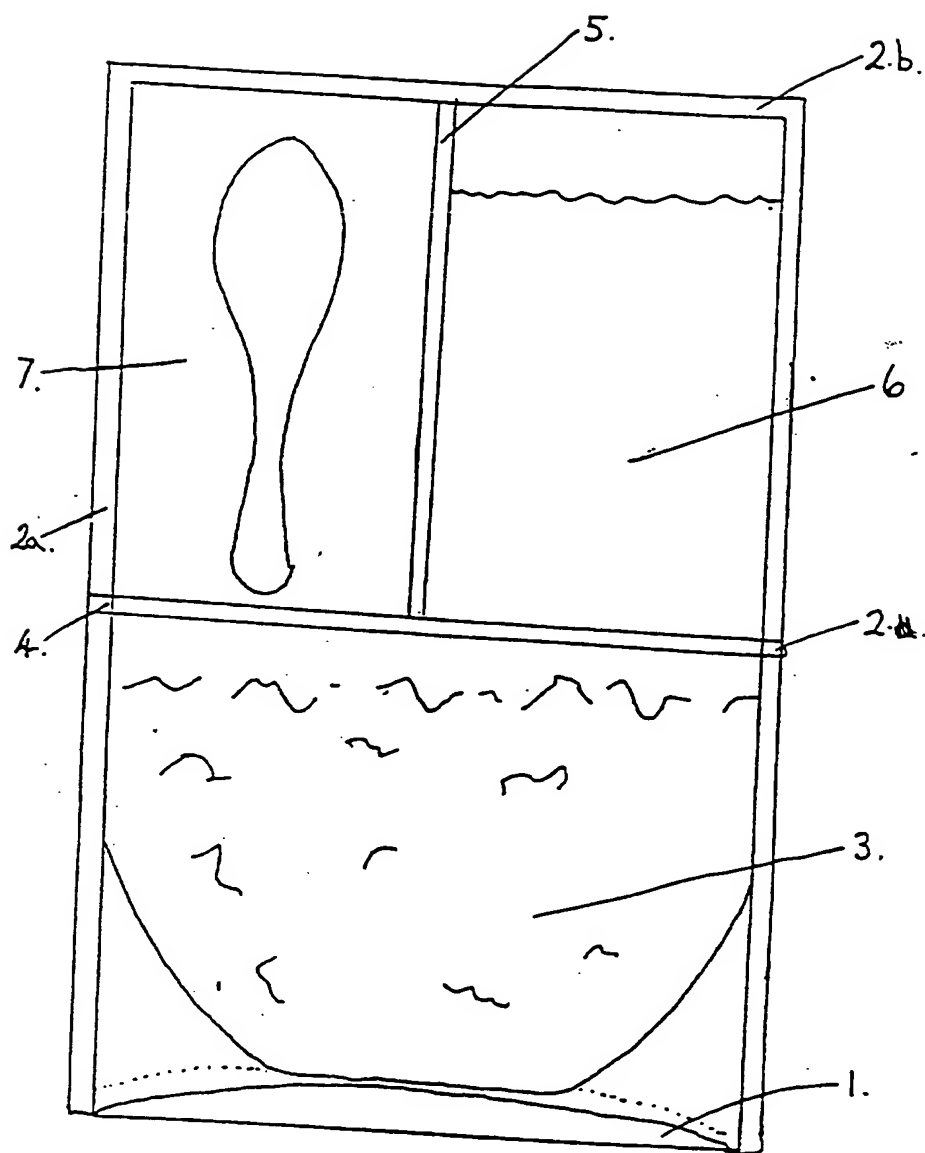


Fig. 2.

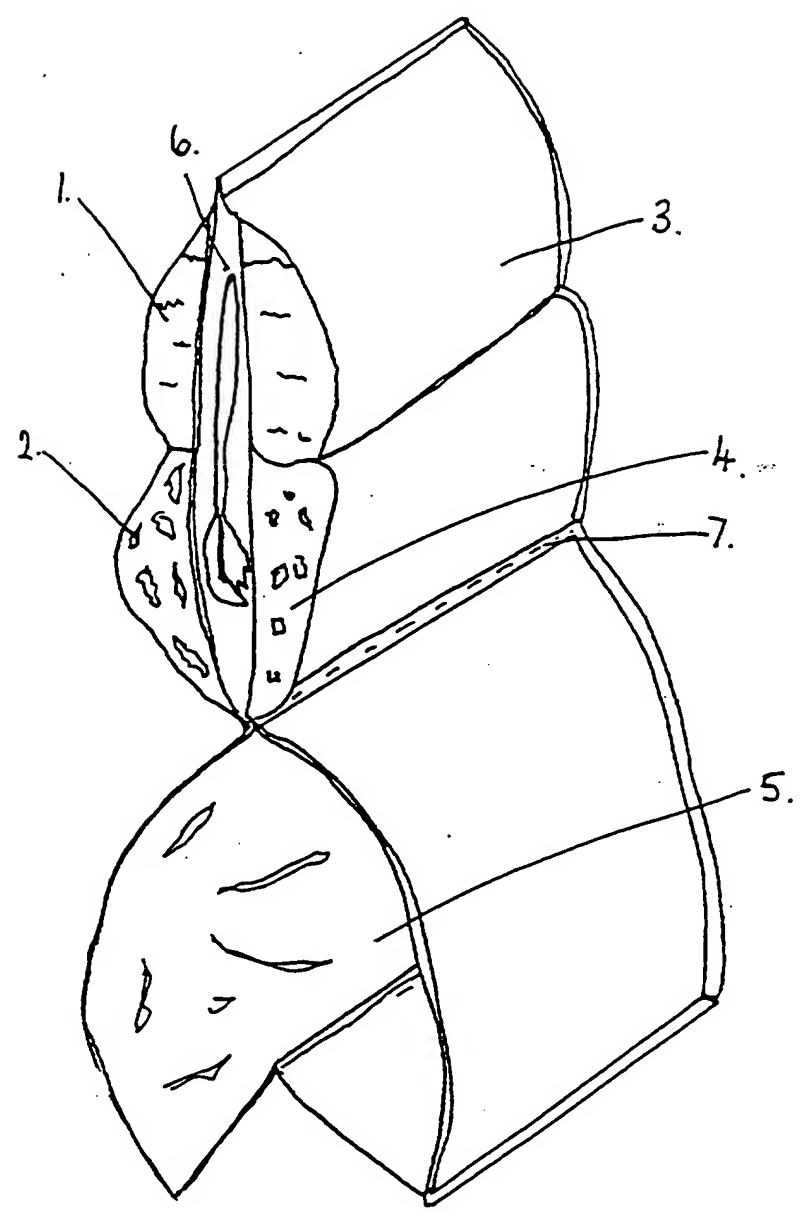
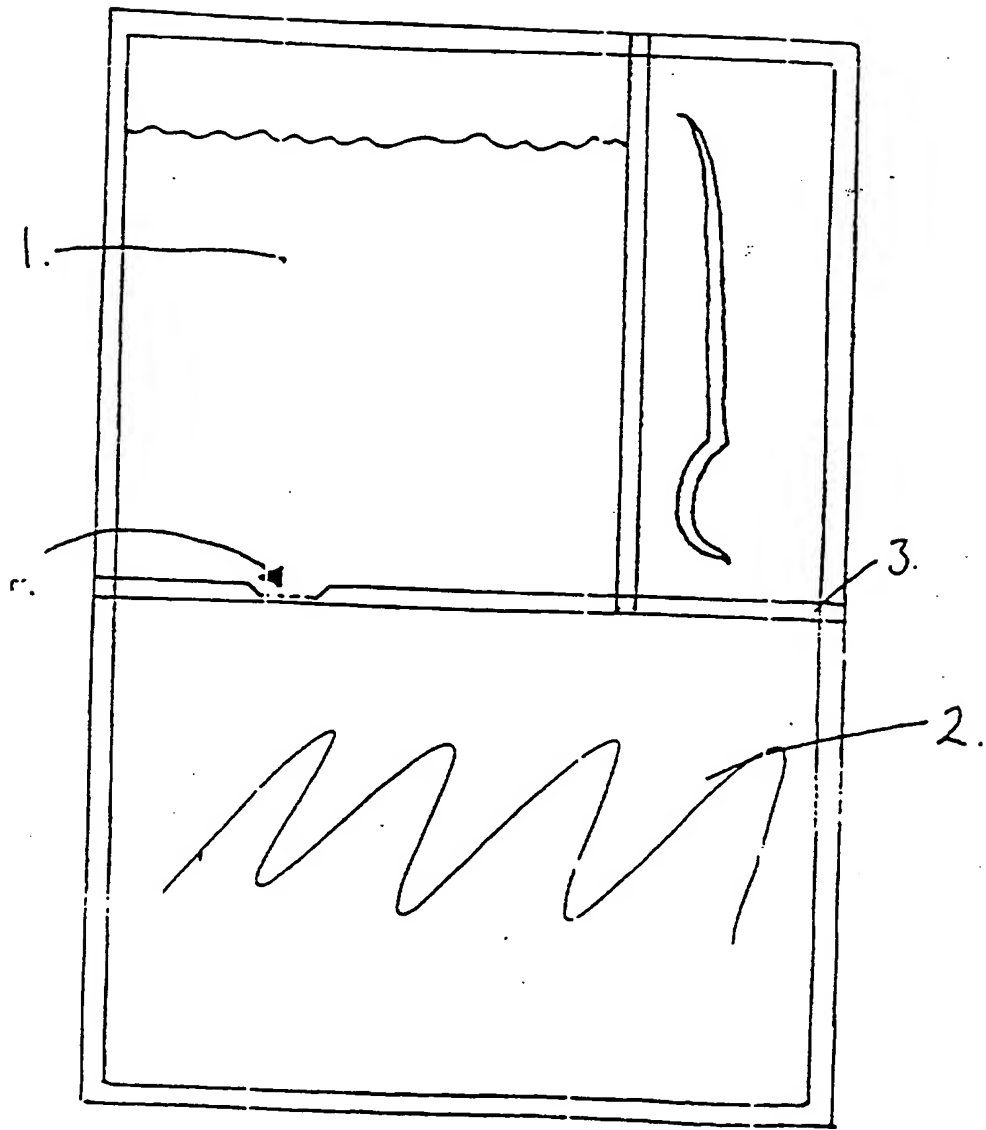
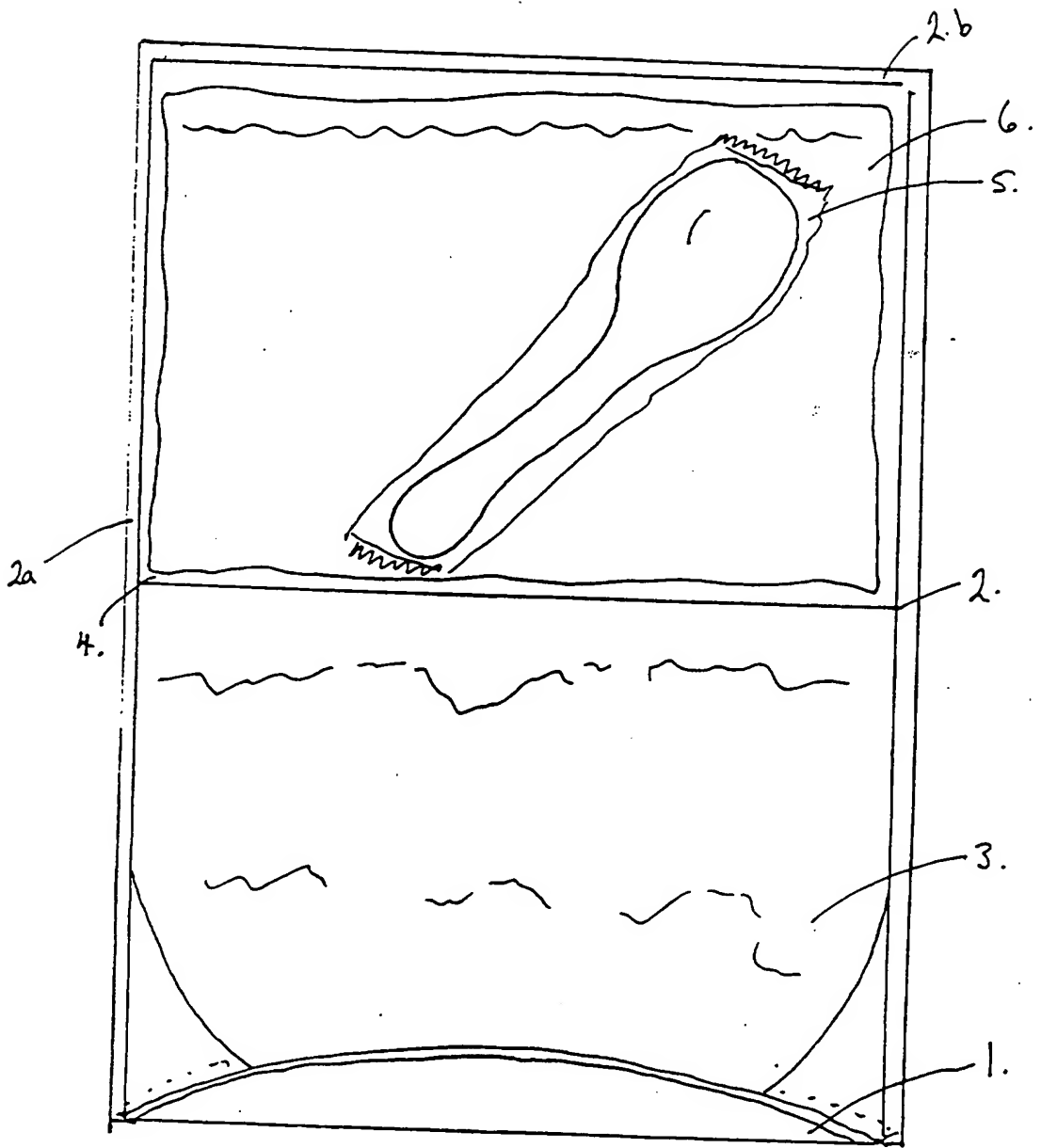


Fig 3





MULTI-POCKETED MEAL SINGLE SERVING CONTAINER

This invention relates to a container formed from flexible sheet material of synthetic resin. The container is particularly adapted to provide a serving holder for single servings of one course of a meal, which course comprises a variety of elements.

Many meals of single servings are made up of a multiplicity of different elements. This is particularly true for meals of cultural ethnic origin, be it Western, African or Eastern.

For instance in the English culture, a traditional meal of fried fish and chips, not only has the two main elements referred to, but for taste generally has other elements such as salt; vinegar and tomato ketchup, combined with it. Again a traditional breakfast of cereal will comprise milk and sugar as well as the grain derived breakfast food.

In a Japanese culture a main fish element may be accompanied with a variety of other sea-food items, sea-weed, strong mustard condiments, sauces and the like.

It is a purpose of this invention to provide the matched elements for the preparation and serving of such a course, each contained in a different pocket of a single inexpensive multi-pocketed flexible container. The individual pockets may either be formed from the wall of the container, may be welded onto it, or may be separate sachet-like containers simply placed in the main pocket. A pocket may be included to accommodate a disposable spoon or other eating aid.

Another purpose of the container is to make it inexpensive and discardable. It may be used to prepare a course of food, either cold, or hot generally being heated in a microwave oven.

It is also a purpose of the invention to provide a container to be used for eating from, thus avoiding the need for a secondary container with related costs, and poor hygiene. The use of a bowl or plate with the subsequent need for cleansing, or the cost of a suitable discardable utensil is thus avoided.

Though using flexible sythentic film the container is so formed to be sufficiently robust to hold the mixed food in the main body of the container once it is opened. The base is formed with a gusset, thus increasing the volume

of the container at the base, permitting it to stand upright and to provide easy access to a spoon or other eating utensil.

In a preferred form of the invention a rectangular sheet of suitable laminated sythetic resinous film is prepared with printed instructions sandwiched with the layers of the composite film. The rectangle is significantly longer on its main axis than on the cross axis. The film is pleated about the centre of the rectangle on either side of the cross axis, and the main faces reflected against each other thus forming a section generally simulating a capital 'W'. The outer borders of the sheets are welded together, thus forming a pouch with an open mouth and a gussetted base.

In a simple form of the invention, a single portion of a breakfast cereal is introduced into the base of the container, and the film above is welded transversely, thus closing the base off, retaining its contents, at least one weld line is made at right angles to this transverse weld and parallel to the border welds, thus forming at least two pockets in the upper portion of the pouch. Suitably pasteurised milk is introduced into one of the upper pockets and a plastic spoon is introduced into the other. The mouth of the pouch is welded shut. Thus a container is formed with three discreet pockets each containing an element of the desired meal.

In use the upper and lower portions of the pouch may fold against each other allowing the container to fit comfortably into a child's pocket and be opened for a supervised meal during school time.

Many forms of the invention are envisaged. In some a sheet containing depressions may be welded against the inner face of the pouch creating separate pockets which are each filled with the measured element of the meal. In others perforations may be introduced between some of the pockets to facilitate their separation, one from another. In other form of the invention, zip-like closure may be welded into the pouch to allow for temporary closure and subsequent re-opening, thus part of a meal may be eaten, the pouch closed and re-opened for the later consumption of the rest of the food.

For a better understanding of the invention reference should be made to the diagrams below.

In fig. 1, an isometric elevator of a typical three pocketed pouch is shown.

Various aspects of the pouch are labelled.

1 - is the gussetted base, permitting the pouch to stand upright.

- 2 - are the welded borders of the pouch.
2a being the original side welds forming the pouch,
and
2b being the final weld closing the mouth of the pouch
- 3 - is the contents, being pre-sugared cornflakes
- 4 - is the transverse weld separating the upper and lower portions of the pouch.
- 5 - is the longitudinal weld forming two discreet pockets on either side of it.
- 6 - is the pocket containing pasteurised milk.
- 7 - is the pocket containing the plastic spoon.

In figure 2, a section of a typical multi-pocketed container is shown where water is contained in two pockets, to be mixed with a dehydrated food products in neighbouring pockets below, ready to be cooked, or at least heated in a microwave oven and then dispensed into a main container below, which contained a vacuum packed protein product. Thus the main components may be eaten with rehydrated vegetables.

- 1 - is the smaller water pocket leading into
- 2 - the smaller vegetable pocket for rehydration
- 3 - is the larger water pocket leading into
- 4 - the large vegetable pocket for rehydration
- 5 - is the main pocket containing the protein
- 6 - is the pocket to accomodate the plastic spoon/fork
- 7 - is a lign of weakness where the container will be torn open, once the rehydration and cooking has taken place and the food is ready for consumption.

It should be noted that the upper portion of the pouch may be folded down in the direction of the arrow.

In another form of the invention, an area of weakness is introduced in the transverse welds made in laminated material. Here the weld is weakened in the inner face of the material within the welded line separating an upper pocket containing a liquid from a lower pocket containing dehydrated material. External pressure on the pocket containing the liquid bursts this area of weakness allowing the liquid to be forced into the lower pocket for mixing.

In figure 3, a plan of a typical multi-pocket version of the invention where the left hand upper pocket 1 contains a liquid to be introduced into a mixing pocket 2 containing a solid. The transverse weld 3, includes an area of weakness 4, shown within the dotted lines.

In Fig 4, an isometric elevator of a two pocketed pouch is shown.
Various aspects of the pouch are shown.

1. Is the gusseted base, permitting the pouch to stand upright.
2. Are the welded borders of the pouch.
 - 2a. Being the original side welds forming the pouch and,
 - 2b. Being the final weld closing the mouth of the pouch.
3. Is the contents.
4. Is the transverse weld separating the upper and lower portions of the pouch.
5. Is the sealed pack- containing spoon.
6. Is an individual pouch containing pasteurised milk.

CLAIMS.

Page 1 of 1.

1. A pouch of flexible plastic film formed to provide separate pockets, particularly to hold different foods for a single serving of a meal.
2. An open mouthed pouch, the mouth being common to atleast two compartments to contain different foods for a single serving of a meal.
3. An open mouthed pouch the mouths being common to atleast two compartments to contain different foods for a single serving of a meal, the foods being held at the lower end of the pouch, where length permits the subsequent introduction of a dividing seal which in turn permits the forming of future compartments to hold other different foods or utensils.
4. A pouch such as 3. Above but where the separating divider may differentiate to be easily released to permit the mixing of specific different food elements in a single serving meal.



Application No: GB 9911769.9
Claims searched: 1-4

Examiner: Stephen Smith
Date of search: 7 September 1999

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.Q): B8C(CWA2)

Int CI (Ed.6): B65D 81/32, 81/34

Other: ONLINE:EPODOC

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	GB 721455	(WHITING) lines 53-76 of page 1	2-4
X	EP 0838412 A1	(NEUENSCHWANDER) line 45 of column 1 to line 13 of column 2	1
X	US 5075119	(MENDENHALL) line 1 of column 4 to line 11 of column 5; lines 29-59 of column 6	1-4
X	US 4145449	(NELHAM) line 25 of column 2 to line 18 of column 3	2-4
X	US 4138014	(BOUMAN) lines 31-63 of column 2	2, 3
X	US 3756389	(FIRTH) lines 7-60 of column 2	1

X Document indicating lack of novelty or inventive step

Y Document indicating lack of inventive step if combined with one or more other documents of same category.

& Member of the same patent family

A Document indicating technological background and/or state of the art.

P Document published on or after the declared priority date but before the filing date of this invention.

E Patent document published on or after, but with priority date earlier than, the filing date of this application.

THIS PAGE BLANK (USPTO)

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

THIS PAGE BLANK (USPTO)